(g) Each emergency switchboard must have the following:
(1) An ammeter with a selector switch that connects the ammeter to show the current for each phase.
(2) A voltmeter with a selector switch that connects the voltmeter to show:
(i) Generator voltage of each phase; and
(ii) Bus voltage of one phase.
(3) Ground detection that meets subpart 111.05 for the emergency lighting system.
(4) A frequency meter.
(5) An exciter field rheostat.
(6) A voltage regulator and a voltage regulator functional cut-out switch.
(h) Each direct-current emergency switchboard must have the:
(1) Equipment under §111.30–27 (b) through (d); and
(2) Ground detection under subpart 111.05 for the emergency lighting system.

[CGD 74–125A, 47 FR 15236, Apr. 8, 1982, as amended by CGD 94–108, 61 FR 28279, June 4, 1996]

Subpart 111.33—Power Semiconductor Rectifier Systems

§ 111.33–1 General.

This subpart is applicable to all power semiconductor rectifier systems. In addition to the regulations contained in this subpart, the requirements of §§111.30–11, 111.30–19 and 111.30–21 of this part must be met, if applicable.

§ 111.33–3 Nameplate data.

(a) Each semiconductor rectifier system must have a nameplate of durable material affixed to the unit that meets the requirements of—
(1) Section 10.20.12 of IEEE 45–2002 (incorporated by reference; see 46 CFR 110.10–1); or
(2) Clause 8 of IEC 60092–304 (incorporated by reference; see 46 CFR 110.10–1).
(b) Each semiconductor rectifier system must have a nameplate containing the words ''marine semiconductor rectifier,'' and the following information:
(1) Manufacturer's name and address.
(2) Manufacturer's serial number.
(3) Type.
(4) Rated AC volts.
(5) Rated AC amperes.
(6) Number of phases.
(7) Frequency.
(8) Rated DC volts.
(9) Rated DC amperes.
(10) Ambient temperature range.
(11) Duty cycle.
(12) Cooling medium.
(c) If, on small rectifiers, the information required by paragraph (a) of this section cannot be shown because of space limitations, the nameplate must be at least large enough to contain the manufacturer's name and serial number. The remaining information must be shown on the schematic diagram.

[CGD 74–125A, 47 FR 15236, Apr. 8, 1982, as amended by CGD 94–108, 61 FR 28279, June 4, 1996; USCG–2003–16630, 73 FR 65197, Oct. 31, 2008; USCG–2013–0671, 78 FR 60153, Sept. 30, 2013]

§ 111.33–5 Installation.

Each semiconductor rectifier system must meet the installation requirements, as appropriate, of—
(a) Sections 10.20.2, 10.20.7, and 10.20.8 of IEEE 45–2002 (incorporated by reference; see 46 CFR 110.10–1); or
(b) IEC 60092–304 (incorporated by reference; see 46 CFR 110.10–1).

[CGD 94–108, 61 FR 28279, June 4, 1996, as amended by USCG–2003–16630, 73 FR 65197, Oct. 31, 2008; USCG–2013–0671, 78 FR 60153, Sept. 30, 2013]

§ 111.33–7 Alarms and shutdowns.

Each power semiconductor rectifier must have a high temperature alarm or shutdown, except as provided in §111.33–11.

§ 111.33–9 Ventilation exhaust.

The exhaust of each forced-air semiconductor rectifier system must:
(a) Terminate in a location other than a hazardous location under Subpart 111.105 of this part; and
(b) Not impinge upon any other electric device.

§ 111.33–11 Propulsion systems.

Each power semiconductor rectifier system in a propulsion system must meet sections 4–8–5/5.17.9 and 4–8–5/5.17.10 of ABS Steel Vessel Rules (incorporated by reference; see 46 CFR